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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,630	08/24/2001	Anil Kumar Dang	P21389	1393
7055	7590	01/12/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			BELL, MELTIN	
			ART UNIT	PAPER NUMBER
			2121	

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/935,630

Applicant(s)

DANG ET AL.

Examiner

Meltin Bell

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2001 and 24 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/30/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to application **09/935,630** filed **08/24/2001**.

Claims 1-32 have been examined.

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the specification.

The disclosure is objected to because of the following informalities:

- 'such as some Internet protocol' on page 4, paragraph 2 makes the sentence unclear
- 'Objects' would read well as 'Summary' on page 5, line 1
- 'campus as claimed in claim 22 wherein' would read well removed on page 9, paragraph 3
- 'as television, projector' would read well as 'as a television or projector' on page 9, paragraph 3
- 'more knowledge center' would read well as 'more knowledge centers' on page 10, last paragraph
- 'to call as' would read well as 'call' on page 11, paragraph 1
- 'equipments' on page 11, paragraph 1 would read well as 'equipment' on page 11, paragraph 1

Art Unit: 2121

- 'campuses receive,' would read well as 'campuses receive' on page 11, paragraph 1
- 'at the university' would read well as 'at the university.' On page 11, paragraph 2
- 'being taught' would read well as 'being taught.' On page 11, paragraph 2
- 'University Access to such assignments etc' would read well as 'University. Access to such assignments, etc.' on page 13, paragraph 3
- 'centres are the and only papers exchanged with the university in The form' would read well as 'centres. The only papers exchanged with the university are in the form' on page 14, paragraph 2
- 'across centers as well as with the University Various forms' would read well as 'across campuses and centers as well as with the University, various forms' on page 14, paragraph 3
- 'may be used This' would read well as 'may be used. This' on page 14, paragraph 3
- 'all the remote centers this' would read well as 'all the remote centers. This' on page 14, paragraph 3
- 'groups, it also encourages students to ask questions especially' would read well as 'groups and students asking questions, especially' on page 14, paragraph 3
- 'anonymously too' would read well as 'anonymously, too' on page 14, paragraph 3

Art Unit: 2121

- 'homework assignments, , machine problems' would read well as 'paper based homework assignments, computer based homework assignments' on page 14, paragraph 5
- 'above is not' would read well as 'above are not' on page 14, paragraph 6
- 'conduct of' would read well as 'starting' on page 15, paragraph 2
- 'same screening tests' would read well as 'same screening test' on page 15, paragraph 2
- the phrase 'whole scale' on page 15, paragraph 2 is unfamiliar. Perhaps 'curve' would be a better substitution
- 'by Internet' on page 15, paragraph 4 would read well as 'by the internet'
- 'control to pause the lecture and solve the problem of the student' would read well as 'control for pausing the lecture and addressing the student's problem' on page 15, last paragraph
- 'clubbed' would read well as 'grouped' on page 16, paragraph 1
- 'through Internet' would read well as 'through the Internet' on page 16, paragraph 1
- 'The question papers are set' would read well as 'The paper examinations are prepared' on page 16, paragraph 1
- 'which degree is the same that' would read well as 'which is the same as that' on page 16, paragraph 1

Appropriate correction is required.

Claim Objections

Claims 1, 5, 26-27 and 30-31 are objected to because of the following informalities:

Regarding claim 1, steps (c),(d):

- '(c)' would read well as '(a)'
- '(d)' would read well as '(b)'

Regarding claim 5:

- 'coherent light signals, broadcasting signals' would read well as 'coherent light signals or broadcasting signals'

Regarding claims 26, 28:

- 'extension classrooms' isn't defined in the specification

Regarding claim 27:

- 'extension classroom' isn't defined in the specification

Regarding claims 30-31:

- 'extended classroom' isn't defined in the specification

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 2121

Claims 1, 3, 7, 9-10, 13, 17, 19-20 and 32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claims (e.g. "knowledge", "instructions", "instructor", "moderator") raise a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. For example, if claim 1 was amended to recite a computer-implemented method and required performance of a result outside of a computer, it will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

Claim Rejections - 35 USC § 112

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 7, 15, 17 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "and third sources of knowledge" on claim 5's line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "and third sources of knowledge" on claim 7's lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "and third means" on claim 15's line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitation "and third means" on claim 17's line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 recites the limitation "and the third means" on claim 17's line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2121

Claims 11-15, 17-19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by *Cook et al* USPN 5,727,950 "Agent based instruction system and method" (March 17, 1998).

Regarding claim 11:

Cook et al teaches,

- (a) first means for imparting knowledge (Fig. 1, item 106; column 20, lines 11-14)
- (b) second means for receiving knowledge from the first means, located at any remote location (Fig. 1, items 109, 102; Fig. 2A, item 209; Fig. 7) and capable of providing knowledge to supplement or complement the first means (column 19, lines 62-67; column 20, lines 1-11)

Regarding claim 12:

Cook et al teaches,

- one or more means to impart knowledge located at remote loci and linked (column 19, lines 54-57) to the first and second means of knowledge

Regarding claim 13:

Cook et al teaches,

- the first means of knowledge is an instructor (column 29, lines 44-50)

Regarding claim 14:

Cook et al teaches,

- the instructions imparted by the first means are collected by audio-visual means (column 29, lines 44-50)

Art Unit: 2121

Regarding claim 15:

Cook et al teaches,

- the instructions imparted by the first means to the second and third means, are transmitted using means selected from transverse electromagnetic waves, electrical signals (column 9, lines 51-54), coherent light signals (column 10, lines 1-4), broadcasting signals (column 47, lines 54-63)

Regarding claim 17:

Cook et al teaches,

- the second and third means are instructors (column 47, lines 54-63)

Regarding claim 18:

The rejection of claim 18 is the same as that for claim 11 as recited above since the stated limitations of the claim are set forth in the reference.

Regarding claim 19:

Cook et al teaches,

- the second source of knowledge is a moderator (column 46, lines 26-32)

Regarding claim 21:

Cook et al teaches,

- additional means located at the first and second means for imparting knowledge such as a library, audio-visual systems (column 14, lines 19-28)

Claim Rejections - 35 USC § 103

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Office presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Office to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-4 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Konopka et al* USPN 5,850,250 "Video distance learning system" (December 15, 1998) in view of *Cook et al* USPN 5,727,950 "Agent based instruction system and method" (March 17, 1998).

Art Unit: 2121

Regarding claim 1:

Konopka et al teaches,

- providing a first source of knowledge capable of transmission in the form of live or recorded instructions, to knowledge receivers at the same place and/or at remote loci (column 1, lines 10-19), said knowledge receivers receiving the knowledge simultaneously (column 5, lines 20-29) or within a predetermined duration, wherein the knowledge imparted by the first source at the same place and remote loci are identical (column 10, lines 66-67; column 11, lines 1-2)

However *Konopka et al* doesn't explicitly teach one second source of knowledge, capable of imparting complementary and/or supplementary instructions to the knowledge receiver located at the remote loci, and also capable of interacting with the first source of knowledge, as and when required, to confirm, clarify or acquire more knowledge from the first knowledge source while *Cook et al* teaches,

- one second source of knowledge, capable of imparting complementary and/or supplementary instructions to the knowledge receiver located at the remote loci (column 19, lines 62-67; column 20, lines 1-15), and also capable of interacting with the first source of knowledge, as and when required, to confirm, clarify or acquire more knowledge from the first knowledge source (column 33, lines 31-48)

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for delivering interactive, adaptive and individualized homework to students in their homes and other locations (*Cook et al*, Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made,

to modify *Konopka et al* as taught by *Cook et al* for the purpose of delivering interactive, adaptive and individualized homework to students in their homes and other locations.

Regarding claim 3:

The rejection of claim 3 is the same as that for claim 1 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 4:

The rejection of claim 4 is the same as that for claim 1 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 8:

The rejection of claim 8 is the same as that for claim 1 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 9:

The rejection of claim 9 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 9's limitations difference is taught in *Cook et al*:

- the second source of knowledge is a moderator (column 46, lines 26-32)

Claims 2, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Konopka et al* in view of *Cook et al* and in further view of *Shapiro* USPN 4,785,472 "Remote Teaching System" (November 15, 1988).

Regarding claim 2:

Konopka et al teaches,

- providing a first source of knowledge capable of transmission in the form of live or recorded instructions, to knowledge receivers at the same place and/or at remote loci (column 1, lines 10-19), said knowledge receivers receiving the knowledge simultaneously (column 5, lines 20-29) or within a predetermined duration, wherein the knowledge imparted by the first source at the same place and remote loci are identical (column 10, lines 66-67; column 11, lines 1-2)

However *Konopka et al* doesn't explicitly teach one second source of knowledge, capable of imparting complementary and/or supplementary instructions to the knowledge receiver located at the remote loci, and also capable of interacting with the first source of knowledge, as and when required, to confirm, clarify or acquire more knowledge from the first knowledge source while *Cook et al* teaches,

- one second source of knowledge, capable of imparting complementary and/or supplementary instructions to the knowledge receiver located at the remote loci (column 19, lines 62-67; column 20, lines 1-15), and also capable of interacting with the first source of knowledge, as and when required, to confirm, clarify or acquire more knowledge from the first knowledge source (column 33, lines 31-48)

Shapiro teaches,

- one or more third source of knowledge located at remote loci and linked to the first and second sources of knowledge (Abstract, Fig. 1)

Art Unit: 2121

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for delivering interactive, adaptive and individualized homework to students in their homes and other locations (*Cook et al*, Abstract) and permitting students to receive the benefits of direct communication with a teacher during a video-taped lecture without the expense of providing direct television links between the teacher and the remote student sites (*Shapiro*, column 6, lines 59-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Konopka et al* as taught by *Cook et al* and *Shapiro* for the purpose of delivering interactive/adaptive/individualized homework to students in their homes and other locations as well as permitting students to receive the benefits of direct communication with a teacher during a video-taped lecture.

Regarding claim 5:

The rejection of claim 5 is the same as that for claims 1 and 2 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 7:

The rejection of claim 7 is the same as that for claims 1 and 2 as recited above since the stated limitations of the claim are set forth in the references.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Konopka et al* in view of *Cook et al* in view of *Shapiro* and in further view of *Quantum Information Systems Ltd*. "Mobility with Academic Integrity" (2001).

Regarding claim 10:

Konopka et al teaches,

- providing a first source of knowledge capable of transmission in the form of live or recorded instructions, to knowledge receivers at the same place and/or at remote loci (column 1, lines 10-19), said knowledge receivers receiving the knowledge simultaneously (column 5, lines 20-29) or within a predetermined duration, wherein the knowledge imparted by the first source at the same place and remote loci are identical (column 10, lines 66-67; column 11, lines 1-2)

However *Konopka et al* doesn't explicitly teach one second source of knowledge, capable of imparting complementary and/or supplementary instructions to the knowledge receiver located at the remote loci, and also capable of interacting with the first source of knowledge, as and when required, to confirm, clarify or acquire more knowledge from the first knowledge source while *Cook et al* teaches,

- one second source of knowledge, capable of imparting complementary and/or supplementary instructions to the knowledge receiver located at the remote loci (column 19, lines 62-67; column 20, lines 1-15), and also capable of interacting with the first source of knowledge, as and when required, to confirm, clarify or acquire more knowledge from the first knowledge source (column 33, lines 31-48)

Shapiro teaches,

- one or more third source of knowledge located at remote loci and linked to the first and second sources of knowledge (Abstract, Fig. 1)

Quantum Information Systems Ltd. teaches,

- the second source of knowledge is a lead moderator and the third source of knowledge is a regional moderator (page 10)

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for delivering interactive, adaptive and individualized homework to students in their homes and other locations (*Cook et al*, Abstract), permitting students to receive the benefits of direct communication with a teacher during a video-taped lecture without the expense of providing direct television links between the teacher and the remote student sites (*Shapiro*, column 6, lines 59-64) and delivering undifferentiated degrees (*Quantum Information Systems Ltd.*, page 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Konopka et al* as taught by *Cook et al*, *Shapiro* and *Quantum Information Systems Ltd.* for the purpose of delivering interactive/adaptive/individualized homework to students in their homes and other locations as well as permitting students to receive the benefits of direct communication with a teacher during a video-taped lecture and delivering undifferentiated degrees.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Konopka et al* in view of *Cook et al* and in further view of *Chiang et al* USPN 5,535,422 "Interactive online tutorial system for software products" (July 9, 1996).

Art Unit: 2121

Regarding claim 6:

Konopka et al teaches,

- providing a first source of knowledge capable of transmission in the form of live or recorded instructions, to knowledge receivers at the same place and/or at remote loci (column 1, lines 10-19), said knowledge receivers receiving the knowledge simultaneously (column 5, lines 20-29) or within a predetermined duration, wherein the knowledge imparted by the first source at the same place and remote loci are identical (column 10, lines 66-67; column 11, lines 1-2)
- the means of transmission is telephone (column 8, lines 52-56) cables (column 3, lines 61-67; column 4, lines 1-3)

However *Konopka et al* doesn't explicitly teach one second source of knowledge, capable of imparting complementary and/or supplementary instructions to the knowledge receiver located at the remote loci, and also capable of interacting with the first source of knowledge, as and when required, to confirm, clarify or acquire more knowledge from the first knowledge source or the means of transmission is internet, post and telephone cables while *Cook et al* teaches,

- one second source of knowledge, capable of imparting complementary and/or supplementary instructions to the knowledge receiver located at the remote loci (column 19, lines 62-67; column 20, lines 1-15), and also capable of interacting with the first source of knowledge, as and when required, to confirm, clarify or acquire more knowledge from the first knowledge source (column 33, lines 31-48)

Art Unit: 2121

- the means of transmission is internet and telephone (column 19, lines 50-61) cables (column 20, lines 1-8)

Chiang et al teaches,

- the means of transmission is post (column 20, lines 40-53)

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for delivering interactive, adaptive and individualized homework to students in their homes and other locations (*Cook et al*, Abstract) and providing instruction in the use of a software product operating on a data processing device (*Chiang et al*, Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Konopka et al* as taught by *Cook et al* and *Chiang et al* for the purpose of delivering interactive/adaptive/individualized homework to students in their homes and other locations as well as providing instruction in the use of a software product operating on a data processing device.

Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by *Cook et al* in view of *Chiang et al*.

Regarding claim 16:

Cook et al teaches,

- (a) first means for imparting knowledge (Fig. 1, item 106; column 20, lines 11-14)
- (b) second means for receiving knowledge from the first means, located at any remote location (Fig. 1, items 109, 102; Fig. 2A, item 209; Fig. 7) and capable of providing

Art Unit: 2121

knowledge to supplement or complement the first means (column 19, lines 62-67;
column 20, lines 1-11)

- the means of transmission is internet and telephone (column 19, lines 50-61) cables
(column 20, lines 1-8)

However, *Cook et al* doesn't explicitly teach the means of transmission is internet, post
and telephone cables while *Chiang et al* teaches,

- the means of transmission is post (column 20, lines 40-53)

Motivation - The portions of the claimed system would have been a highly desirable
feature in this art for providing instruction in the use of a software product operating on a
data processing device (*Chiang et al*, Abstract). Therefore, it would have been obvious
to one of ordinary skill in the art at the time the invention was made, to modify *Cook et
al* as taught by *Chiang et al* for the purpose of providing instruction in the use of a
software product operating on a data processing device.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Cook et
al* in view of *Quantum Information Systems Ltd*.

Regarding claim 20:

Cook et al teaches,

- (a) first means for imparting knowledge (Fig. 1, item 106; column 20, lines 11-14)
- (b) second means for receiving knowledge from the first means, located at any remote
location (Fig. 1, items 109, 102; Fig. 2A, item 209; Fig. 7) and capable of providing

Art Unit: 2121

knowledge to supplement or complement the first means (column 19, lines 62-67;
column 20, lines 1-11)

- the second source of knowledge is a moderator (column 46, lines 26-32)

However, *Cook et al* doesn't explicitly teach the second means is a lead moderator and the third means is a regional moderator while *Quantum Information Systems Ltd.* teaches,

- the second means is a lead moderator and the third means is a regional moderator (page 10)

Motivation - The portions of the claimed system would have been a highly desirable feature in this art for delivering undifferentiated degrees (*Quantum Information Systems Ltd.*, page 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Cook et al* as taught by *Quantum Information Systems Ltd.* for the purpose of delivering undifferentiated degrees.

Claims 22, 24-26 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Cook et al* in view of *Porter* "The changing roles of educators: using e-mail, CD-ROM, and online documentation in the technical writing classroom" (October 1994).

Regarding claim 22:

Cook et al teaches,

(i) one or more classrooms with students (column 1, lines 66-67; column 2, lines 1-8)

Art Unit: 2121

(ii) said classrooms being provided with means for providing instructions received from a remote source (column 19, lines 62-67; column 20, lines 1-15)

(iii) a moderator (column 46, lines 26-32) for supplementing or complementing the instructions (column 19, lines 62-67; column 20, line 1) received from the remote source

However, *Cook et al* doesn't explicitly teach a moderator present in the classroom while *Porter* teaches,

- a moderator present in the classroom (page 228, right column, paragraph 1)

Motivation - The portions of the claimed campus would have been a highly desirable feature in this art for sharing information (*Porter*, page 228, right column, paragraph 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Cook et al* as taught by *Porter* for the purpose of sharing information.

Regarding claim 24:

The rejection of claim 24 is the same as that for claim 22 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 25:

The rejection of claim 25 is similar to that for claim 22 as recited above since the stated limitations of the claim are set forth in the references. Claim 25's limitations difference is taught in *Porter*:

- means for imparting knowledge in the classroom is an audio visual means such as television, projector (page 230, left column, paragraph 3)

Regarding claim 26:

The rejection of claim 26 is similar to that for claim 22 as recited above since the stated limitations of the claim are set forth in the references. Claim 26's limitations difference is taught in *Cook et al*:

- one or more extension classrooms located at places remote from the classroom and the remote source (Abstract)

Regarding claim 29:

The rejection of claim 29 is similar to that for claim 22 as recited above since the stated limitations of the claim are set forth in the references. Claim 29's limitations difference is taught in *Cook et al*:

- library or audio-visual systems to impart additional knowledge to the students (column 14, lines 19-28)

Regarding claim 30:

The rejection of claim 30 is similar to that for claim 22 as recited above since the stated limitations of the claim are set forth in the references. Claim 30's limitations difference is taught in *Porter*:

- projects are executed jointly by the students from the classroom (page 232, left column, paragraph 2) or the students from the extended classroom with the students of the remote source

Claims 23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Cook et al* in view of *Porter* and in further view of *Konopka et al*.

Art Unit: 2121

Regarding claim 23:

Cook et al teaches,

- (i) one or more classrooms with students (column 1, lines 66-67; column 2, lines 1-8)
- (ii) said classrooms being provided with means for providing instructions received from a remote source (column 19, lines 62-67; column 20, lines 1-15)
- (iii) a moderator (column 46, lines 26-32) for supplementing or complementing the instructions (column 19, lines 62-67; column 20, line 1) received from the remote source
- an instructor (column 29, lines 44-50) for imparting knowledge to the students

However, *Cook et al* doesn't explicitly teach a moderator present in the classroom or recording means while *Porter* teaches,

- a moderator present in the classroom (page 228, right column, paragraph 1)

Konopka et al teaches,

- the remote source is a classroom comprising students, recording and transmitting means and an instructor for imparting knowledge to the students (column 9, lines 33-67; column 10, lines 1-4)

Motivation - The portions of the claimed campus would have been a highly desirable feature in this art for sharing information (*Porter*, page 228, right column, paragraph 2) and facilitating contact between the teacher in a teaching classroom and students in remote classrooms (*Konopka et al*, Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Cook et al* as taught by *Porter* and *Konopka et al* for the purpose of sharing information as well as facilitating contact between the teacher and students.

Regarding claim 27:

The rejection of claim 27 is the same as that for claims 23 and 22 as recited above since the stated limitations of the claim are set forth in the references.

Claims 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Cook et al* in view of *Porter* and in further view of *Quantum Information Systems Ltd.*

Regarding claim 28:

Cook et al teaches,

- (i) one or more classrooms with students (column 1, lines 66-67; column 2, lines 1-8)
- (ii) said classrooms being provided with means for providing instructions received from a remote source (column 19, lines 62-67; column 20, lines 1-15)
- (iii) a moderator (column 46, lines 26-32) for supplementing or complementing the instructions (column 19, lines 62-67; column 20, line 1) received from the remote source
 - one or more extension classrooms located at places remote from the classroom and the remote source (Abstract)

However, *Cook et al* doesn't explicitly teach a moderator present in the classroom or lead/regional moderators while *Porter* teaches,

- a moderator present in the classroom (page 228, right column, paragraph 1)

Quantum Information Systems Ltd. teaches,

- each of the extension classrooms comprise regional moderators who report to a lead moderator available at the classroom (page 10)

Art Unit: 2121

Motivation - The portions of the claimed campus would have been a highly desirable feature in this art for sharing information (*Porter*, page 228, right column, paragraph 2) and delivering undifferentiated degrees (*Quantum Information Systems Ltd.*, page 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Cook et al* and *Quantum Information Systems Ltd.* as taught by *Porter* for the purpose of sharing information as well as delivering undifferentiated degrees.

Regarding claim 31:

The rejection of claim 31 is the same as that for claims 22 and 28 as recited above since the stated limitation of the claim are set forth in the references.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Konopka et al* in view of *Cook et al* in view of *Quantum Information Systems Ltd.* and in further view of *Porter*.

Regarding claim 32:

Konopka et al teaches,

- (a) providing a first source of knowledge capable of transmission in the form of live or recorded instructions, to knowledge receivers at the place of the first source of knowledge and at remote second source of knowledge at remote loci (column 1, lines 10-19), said knowledge receivers receiving the knowledge simultaneously (column 5, lines 20-29) or within a predetermined duration, wherein the knowledge imparted by the

Art Unit: 2121

first source at the same place and the second source are identical (column 10, lines 66-67; column 11, lines 1-2)

- (c) the mode of communication between the knowledge receiver at the second source and the knowledge receiver at the first source or the first source of knowledge (column 3, lines 4-9) is through electronic (column 2, lines 2-9) media

- creating a virtual classroom in a remote loci (column 3, lines 10-33)

However, *Konopka et al* doesn't explicitly teach the knowledge receiver at the second source substantially adheres to the same scheme and deadlines prescribed to the knowledge receiver at the first source of knowledge or the knowledge receiver at the second source is evaluated periodically while *Cook et al* teaches,

- (c) the mode of communication between the knowledge receiver at the second source and the knowledge receiver at the first source or the first source of knowledge is through electronic (column 4, lines 46-67; column 5, lines 1-3) media

- the knowledge receiver at the second source substantially adheres to the same scheme and deadlines (column 29, lines 15-30) prescribed to the knowledge receiver at the first source of knowledge

- the knowledge receiver at the second source is evaluated periodically (column 28, lines 17-22)

Quantum Information Systems Ltd. teaches,

- (b) the knowledge receiver at the second source interacts with the first source knowledge source as if the knowledge receiver is located at the first source of

Art Unit: 2121

knowledge and substantially adheres to the same scheme and deadlines prescribed to the knowledge receiver at the first source of knowledge (page 9)

- (d) the knowledge receiver at the second source is assisted by moderator(s), said moderators being specialized in the field of the first source of knowledge (page 10)

- (e) the knowledge receiver at the second source is evaluated periodically at the first source of knowledge in the same manner as the knowledge receiver at the first source, and when the knowledge receiver at the second source fulfills the requirements of the first source of knowledge, is awarded with an undifferentiated degree (page 6), thereby creating a virtual classroom in a remote loci

Porter teaches,

- said moderators being specialized in the field of the first source of knowledge (page 228, right column, paragraph 1)

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for delivering interactive, adaptive and individualized homework to students in their homes and other locations (*Cook et al*, Abstract), delivering undifferentiated degrees (*Quantum Information Systems Ltd.*, page 6) and sharing information (*Porter*, page 228, right column, paragraph 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Konopka et al* as taught by *Cook et al*, *Quantum Information Systems Ltd.* and *Porter* for the purpose of delivering interactive/adaptive/individualized homework to students in their homes and other locations as well as delivering undifferentiated degrees and sharing information.

Conclusion

The prior art made of record is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the Office should be directed to Melvin Bell whose telephone number is 571-272-3680. This Examiner can normally be reached on Mon - Fri 7:30 am - 4:00 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anthony Knight, can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MB / *mu. n*
January 5, 2005


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